Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method comprising the steps of:

providing a disk surface that is divided into a plurality of zones, the disk surface having a head associated therewith;

measuring amplitudes of a plurality of AGC fields in a first of said plurality of zones;

storing a calibrated value, which is based upon the measured amplitudes, onto the disk surface for use in determining whether a high fly write condition exists in the first of said plurality of zones;

receiving a write command to write a block of data in the first of said plurality of zones;

measuring an amplitude of an AGC field in the first of said plurality of zones in response to the write command;

comparing the measured amplitude to the calibrated value;

~~writing the block of data onto the disk surface in a data sector associated with the AGC field in the first of said plurality of zones; and,~~

determining whether the measured amplitude is within a predetermined tolerance in comparison to the calibrated value[[,]];

writing the block of data onto the disk surface in a data sector associated with the AGC field in the first of said plurality of zones before the disk surface completes one

revolution after measuring the measured amplitude ~~wherein the block of data is written onto the disk surface~~ regardless of whether the measured amplitude is within the predetermined tolerance; and,

reading the block of data written onto the disk surface after the disk surface completes the one revolution and before the disk surface completes two revolutions after measuring the measured amplitude and performing a write verification on the block of data read from the disk surface if the measured amplitude is outside of the predetermined tolerance.

2. (cancelled)

3. (cancelled)

4. (currently amended) The method of claim 1 including the step of:

re-measuring the amplitude of the AGC field in the first of said plurality of zones ~~when~~ if the measured amplitude is outside of the predetermined tolerance in comparison to the calibrated value.

5. (original) The method of claim 4 including the steps of:

re-writing the block of data onto the disk surface in the data sector associated with the AGC field in the first of said plurality of zones; and,

determining whether the re-measured amplitude is within the predetermined tolerance in comparison to the calibrated value.

6. (original) The method of claim 5 including the step of:

determining whether a high fly write flag has been set if the re-measured amplitude is outside of the predetermined tolerance in comparison to the calibrated value.

7. (original) The method of claim 6 including the step of:

performing a burnishing process by allowing the head to contact the disk surface, if the high fly write flag has not been set.

8. (currently amended) The method of claim [[7]] 6 including the step of:

setting [[a]] the high fly write flag.

9. (original) The method of claim 6 including the step of:

writing the block of data to a different data sector on the disk surface if the high fly write flag has been set.

10. (original) The method of claim 6, including the steps of:

providing a second disk surface; and,

writing the block of data to a data sector on the second disk surface.

11. (original) The method of claim 1, wherein said calibrated value is an average of the measured amplitudes.

12. (currently amended) The method of claim 1, wherein said calibrated ~~values~~ value is stored in a utility sector on the disk surface.

13. (original) The method of claim 1, wherein the steps of claim 1 are performed during a self-test procedure.

14. (original) The method of claim 1, wherein the first of said plurality of zones is a single track.

15. (currently amended) The method of claim 1 including the step of:

performing a burnishing process by allowing the head to contact the disk surface ~~when~~ if the measured amplitude is outside of the predetermined tolerance in comparison to the calibrated value.

16. (previously presented) The method of claim 1 including the step of:

verifying that the block of data written onto the disk surface was properly written when the measured amplitude is outside of the predetermined tolerance in comparison to the calibrated value.

17. (currently amended) The method of claim 16 including the step of:

performing a burnishing process by allowing the head to contact the disk surface ~~when~~ if the block of data written onto the disk surface could not be verified as being properly written.

18. (original) The method of claim 1, wherein the calibrated value is used as an initial value for a running average of amplitudes of AGC fields within the first of said plurality of zones.

19. (original) The method of claim 18, wherein the running average is made up of a predetermined number of samples of amplitudes of AGC fields within the first of said plurality of zones.

20. (original) The method of claim 19 including the steps of:

receiving a write command to write a block of data in the first of said plurality of zones;

measuring an amplitude of an AGC field in the first of said plurality of zones in response to the write command; and,

comparing the measured amplitude to the running average.

21. (original) The method of claim 20 including the steps of:

writing the block of data onto the disk surface in a data sector associated with the AGC field in the first of said plurality of zones; and,

determining whether the measured amplitude is within a predetermined tolerance in comparison to the running average.

22. (currently amended) The method of claim 21 including the step of:

re-measuring the amplitude of the AGC field in the first of said plurality of zones ~~when~~ if the measured amplitude is outside of the predetermined tolerance in comparison to the running average.

23. (original) The method of claim 22 including the steps of:

re-writing the block of data onto the disk surface in the data sector associated with the AGC field in the first of said plurality of zones; and,

determining whether the re-measured amplitude is within the predetermined tolerance in comparison to the running average.

24. (original) The method of claim 23 including the step of:

determining whether a high fly write flag has been set if the re-measured amplitude is outside of the predetermined tolerance in comparison to the running average.

25. (currently amended) The method of claim 24 [[23]] including the step of:

performing a burnishing process by allowing the head to contact the disk surface, if the high fly write flag has not been set.

26. (currently amended) The method of claim 24 [[25]] including the step of:

setting the [[a]] high fly write flag.

27. (original) The method of claim 24 including the step of:

writing the block of data to a different data sector on the disk surface if the high fly write flag has been set.

28. (original) The method of claim 24, including the steps of:

providing a second disk surface; and,

writing the block of data to a data sector on the second disk surface.

29. (original) The method of claim 19, wherein the first of said plurality of zones is a single track.

30. (currently amended) The method of claim 21 including the step of:

performing a burnishing process by allowing the head to contact the disk surface ~~when~~ if the measured amplitude is outside of the predetermined tolerance in comparison to the running average.

31. (currently amended) The method of claim 21 including the step of:

verifying that the block of data written onto the disk surface was properly written ~~when~~ if the measured amplitude is outside of the predetermined tolerance in comparison to the running average.

32. (currently amended) The method of claim 31 including the step of:

performing a burnishing process by allowing the head to contact the disk surface ~~when~~ if the block of data written onto the disk surface could not be verified as being properly written.

33. (cancelled)

34. (cancelled)

35. (cancelled)

36. (currently amended) A method for use in a disk drive having a disk surface divided into a plurality of zones, the method comprising the steps of:

measuring amplitudes of a plurality of AGC fields stored on the disk surface on a zone-by-zone basis;

storing, on the disk surface, calibrated values corresponding to each zone based upon the measured amplitudes;

receiving a write command to write a block of data in a first of said plurality of zones;

measuring an amplitude of an AGC field in the first of said plurality of zones in response to the write command;

comparing the measured amplitude to a calibrated value corresponding with the first of the plurality of zones;

~~writing the block of data onto the disk surface in a data sector associated with the AGC field in the first of said plurality of zones; and,~~

determining whether the measured amplitude is within a predetermined tolerance in comparison to the calibrated value corresponding with the first of the plurality of zones[[,]];

writing the block of data onto the disk surface in a data sector associated with the AGC field in the first of said plurality of zones before the disk surface completes one revolution after measuring the measured amplitude ~~wherein the block of data is written onto the disk surface~~ regardless of whether the measured amplitude is within the predetermined tolerance; and,

reading the block of data written onto the disk surface after the disk surface completes the one revolution and before the disk surface completes two revolutions after measuring the measured amplitude and performing a write verification on the block of data read from the disk surface if the measured amplitude is outside of the predetermined tolerance.

37. (cancelled)

38. (cancelled)

39. (previously presented) The method of claim 36 including the steps of:

receiving a write command to write a block of data in a second of said plurality of zones;

measuring an amplitude of an AGC field in the second of said plurality of zones in response to the write command; and,

comparing the measured amplitude of the AGC field in the second of said plurality of zones to a calibrated value corresponding with the second of the plurality of zones.

40. (currently amended) The method of claim [[1]] 39, wherein the first of said plurality of zones is a single track and the second of said plurality of zones is a single track.

41. (original) The method of claim 36, wherein said calibrated values corresponding to each zone are an average of the measured amplitudes corresponding to each zone.

42. (original) The method of claim 36, wherein the calibrated values corresponding to each zone are used as initial values for running averages of amplitudes of AGC fields corresponding with each of said plurality of zones.

43. (original) The method of claim 42, wherein the running averages corresponding with each of said plurality of zones are made up of a predetermined number of samples of amplitudes of AGC fields within their corresponding zones.

44. (cancelled)

45. (cancelled)

46. (previously presented) The method of claim 5 including the step of:

writing the block of data to a different data sector on the disk surface only after a burnishing operation has been performed in connection with attempting to write the block of data.

47. (new) The method of claim 1, including writing the block of data onto the disk surface in the data sector while comparing the measured amplitude to the calibrated value.

48. (new) The method of claim 1, including writing the block of data onto the disk surface in the data sector after comparing the measured amplitude to the calibrated value.

49. (new) The method of claim 1, including writing the block of data onto the disk surface in the data sector slightly after comparing the measured amplitude to the calibrated value.

50. (new) The method of claim 36, including writing the block of data onto the disk surface in the data sector while comparing the measured amplitude to the calibrated value.

51. (new) The method of claim 36, including writing the block of data onto the disk surface in the data sector after comparing the measured amplitude to the calibrated value.

52. (new) The method of claim 36, including writing the block of data onto the disk surface in the data sector slightly after comparing the measured amplitude to the calibrated value.